

# APPENDIX F: CASE STUDIES

## GREEN FACTOR

Case studies suggest that minimum Green Factor scores of .30 would be appropriate for new construction 20,000 square feet or greater within the Livable South Downtown planning area. While green roofs and vegetated walls are landscaping options in all Green Factor areas, it is likely that they would be required more frequently in South Downtown to meet the recommended minimum score. Therefore, a threshold of 20,000 square feet is recommended in order to avoid burdening small projects where the costs of a green roof or vegetated wall would be disproportionate to the overall size of the project. Finally, provisions are included to ensure that the Pioneer Square Preservation Board or the International Special Review District Board may modify the .30 standard if it is determined that historic resources would be compromised as a result of the Green Factor requirement.

The case studies focus on recent commercial and residential projects from other parts of Seattle that are similar to the expected new development in South Downtown. Starting with the minimum score of .30 applied to commercial zones, these case studies asked the following:

- Would the precedent projects meet the Green Factor as built under existing code?
- If not, what additional landscape features would be necessary?
- What would the additional construction costs be?

Summary of South Downtown Green Factor case studies

Example comparable to likely South Downtown building typology	Score of project as built	Additional landscape features needed to meet .30	Estimated cost of additional features	% of total building cost
160' Office Buildings				
Life Sciences Building	0.22	2,000 s.f. vegetated wall, 2,000 s.f. permeable paving	\$40,000	0.10%
Opus Center at Union Station	0.09	6,360 s.f. permeable paving, 15,400 s.f. green roof	\$339,800	0.52%
Amazon Block 35, SLU	0.34*	none	n/a	n/a
240' Residential Buildings				
Meridian	0.44	none	n/a	n/a
85' Residential Buildings				
Oregon 42 Condominiums	0.42	none	n/a	n/a
Midrise condos (11 <sup>th</sup> & Jefferson)	0.54	none	n/a	n/a
Pioneer Square Redevelopment				
Diamond surface parking lot**	0.06	1,700 s.f. green roof	\$34,000	0.79%

\* Amazon Block 35 was required to meet a .30 Green Factor score for permit approval. It is included here because it is similar to the types of office development expected in South Downtown.

\*\* The Pioneer Square case study is based on hypothetical redevelopment of a surface parking lot in the Pioneer Square historic overlay. It was assumed that this lot would be redeveloped as a four-story building with retail at street level.

All precedents for multifamily residential development exceeded a .30 score. Commercial buildings that did not meet .30 could do so with the addition of permeable paving, vegetated walls, and/or green roofs typically covering less than a quarter of the total roof area. With the exception of the Pioneer Square case study, additional costs to meet a .30 Green Factor score were one half of one percent or less – proportional to the additional costs anticipated for commercial Green Factor projects.

Options for meeting a .30 score in Pioneer Square were somewhat more constrained and expensive. While the other case studies could meet the minimum score through a variety of routes in addition to the ones explored here, the zero lot line setback and areaways (vacant space) below the sidewalk limited options for this parcel to earn Green Factor credits at grade. A substantial vegetated wall or a green roof covering about a third of the roof area were the only options, leading to additional costs of about 0.8% of total building cost

## MID-BLOCK CORRIDOR

In general, heights of buildings in Little Saigon would be limited to 65 or 85 feet. However, in certain circumstances, higher heights may be possible, particularly if the occupants of taller buildings can be served by a network of pedestrian-oriented open spaces.

In the DMR/C and DMC zones in South Downtown, buildings may be constructed to 150 feet in height if bonus floor area is gained through development of a mid-block corridor open space public amenity. Floor area above 65 feet must be in residential use only, and additional floor area may be gained only through participation in the incentive zoning program with the development of the corridor.

Standards for the mid-block corridor include: located a minimum of 200 feet from the nearest north-south street; directly accessible from the sidewalk, 65% open to the sky; an average width of 25 feet; accessible to the public at least 10 hours each day; at least one open space with a minimum dimension of 30' located along the corridor.

The case studies on the following pages feature two properties located within the proposed DMR/C area. They analyze how the mid-block corridor would be implemented in conjunction with proposed heights and other features of incentive zoning programs. See page 63 for a more detailed description of the mid-block corridor public amenity. See page 80 for a description of proposed incentive zoning programs.



